

nothing but mention of a set of placoid teeth, upper and under, of a species of *Myliobatis*, which I remember to have extracted from the remnants of another old dried Ray on the beach at the same time, and which I finally deposited in Prof. Huxley's hands in the Museum of Economic Geology. What became of the piece of *Myriosteon* I have forgotten altogether.

But that it *did come from the snout of a Ray*, and not of a *Pristis*, the little preparation I now send you seems to confirm.

In this preparation (taken from a *young* Thornback, which I found on the beach at Budleigh-Salterton on the 12th May) you will see your *Myriosteon* in miniature.

If you hold it up between you and the light, you will see, halfway up, on its surface the radiated osselet structures with a common lens, and with a higher power the veritable osselet structure of your *Myriosteon*.

Now, if you look into the cavity of the cranium (a portion of which still adheres to the snout), you will observe that this cavity is continued on into the *Myriosteon*; and a little imagination will enable you to see that this cavity represents the cribriform plate of the ethmoid bone prolonged into a conical tube, the holes of which, for the issue of the olfactory nerves, may be the holes which exist on each side of your *Myriosteon Higginsii*.

Geographical Distribution of Australian Whales.

I have just received a pair of the ear-bones of *Posecopia Nova Zealandie* and some blades of the baleen of *Balœna marginata*, direct from the sea near Swan River, showing that both these species are common to the west coast of Australia and New Zealand.—
J. E. GRAY.

On the Structure of a Fern-stem from the Lower Eocene of Herne Bay, and on its Allies, recent and fossil. By W. CARRUTHERS, Esq., F.L.S., F.G.S.

The author described the characters of the fossil-stem of a Fern obtained by George Dowker, Esq., F.G.S., from the beach at Herne Bay, and stated that in its structure it agreed most closely with the living *Osmunda regalis*, and certainly belonged to the Osmundacœe. The broken petioles show a single crescentic vascular bundle. The section of the true stem shows a white parenchymatous medulla, a narrow vascular cylinder interrupted by long slender meshes from which the vascular bundles of the petioles spring, and a parenchymatous cortical layer. The author described the arrangement of these parts in detail, and indicated their agreement with the same parts in *Osmunda regalis*. He did not venture to refer the Fern, to which this stem had belonged, positively to the genus *Osmunda*, but preferred describing it as an *Osmundites*, under the name of *O. Doukeri*. The specimen was silicified; and the author stated that

even the starch-grains contained in its cells, and the mycelium of a parasitic Fungus traversing some of them, were perfectly represented. Its precise origin was unknown: it was said to be probably derived from the London Clay, or from the beds immediately below.—*Proc. Geol. Soc.* March 9, 1870.

Observations on the Ornithological Fauna of the Bourbonnais during the Middle Tertiary Period. By M. A. MILNE-EDWARDS.

When I commenced the palæontological investigation of the tertiary strata of the Bourbonnais, I was far from thinking that the birds whose remains are buried in those deposits would furnish clearer and more precise indications as to the general character of the miocene fauna of that part of France than the fossil mammalia and reptiles of the same region. In fact, birds, being endowed with powerful organs of locomotion, are in general less settled than the species belonging to the classes mammalia and reptiles.

When I presented to the Academy my work on the fossil birds of France, there was nothing to justify me in expressing an opinion of this kind; but by pursuing my researches upon this subject I have arrived at new results, which seem to me of great importance and of a nature to enlighten us as to the character of this tertiary fauna better than the palæontological history of the other vertebrate animals of the basin of the Allier, in the present state of our knowledge.

Among the fossil birds the presence of which I have recently ascertained in the tertiary deposits of Saint-Gerand-le-Puy and Langy, there are several which give to this ancient fauna an almost intertropical and, especially, an African character—namely, Parrots, Trogons, Salanganes, Gangas, Marabouts, and Secretaries or Serpent-eaters.

The Parrots constitute a perfectly natural family, well-marked and easily characterized by the structure of the bones as well as by the external form. It occupies the hottest regions in both hemispheres, and has no representatives in the present day either in Europe or in extratropical Asia, or in the part of America situated north of the Gulf of Mexico.

In the tertiary period there existed in France a parrot which, in its osteological characters, differs notably from the Australian types, as also from the maceaws and other American genera, and presents much analogy with certain African species, especially *Psittacus erythacus* of Senegal and South Africa. This tertiary parrot (which I have called *Psittacus Ferreauxii*, and which I shall describe in one of the next parts of my work on fossil birds) is the sole example of a parrot which lived in geological times, and it establishes the first mark of resemblance between the miocene ornithological fauna of the Allier and the existing fauna of Africa.

The Courouneous or Trogons, the plumage of which is not less brilliant than that of the Parrots, now inhabit the hottest parts of the globe; they occur in America, in Asia, and in Africa, but only in